

B<sup>8</sup> for analyzing how PTH interacts with its receptor and induces G protein coupling, and should help to constrain models of the overall topological orientation of PTH complexed with its receptor.

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***In the Claims:***

~~✓~~ Please cancel claims 12 and 13 without prejudice or disclaimer to the subject matter claimed therein.

Please substitute the following claim 1 for the pending claim 1:

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1. (Once amended) A compound of the structure or formula S-(L)<sub>n</sub>-B wherein:

- B<sup>9</sup>
- (a) S is an amino terminal signaling functional domain of PTH;
  - (b) L is a linker molecule present n times; and
  - (c) B is a carboxy terminal binding domain of PTH(1-34) or PTHrP(1-34)

and wherein said compound is biologically active.

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Please substitute the following claim 5 for the pending claim 5:

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B<sup>10</sup> 5. (Once amended) The isolated polypeptide of claim 2, wherein L is selected from the group consisting of Gly<sub>5</sub>, Gly<sub>7</sub> and Gly<sub>9</sub>.

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Please substitute the following claim 6 for the pending claim 6:

6. (Once amended) The isolated polypeptide of claim 2, wherein B is selected from the group consisting of PTH(15-31) (Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val) (SEQ ID NO:2), PTH(17-31) (Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val) (SEQ ID NO:63), PTHrP (15-31) (Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile) (SEQ ID NO:8), and PTHrP(17-31) (Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile) (SEQ ID NO:12).

Please substitute the following claim 7 for the pending claim 7:

7. (Once amended) The isolated polypeptide of claim 2 selected from the group consisting of PG5: Ala Val Ser Glu Ile Gln Leu Met His Gly Gly Gly Gly Gly Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:3), PG9: Ala Val Ser Glu Ile Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:5), PG7: Ala Val Ser Glu Ile Gln Leu Met His Gly Gly Gly Gly Gly Gly Gly Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:6), PrPG5: Ala Val Ser Glu His Gln Leu Leu His Gly Gly Gly Gly Gly Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile (SEQ ID NO:64), PrPG9: Ala Val Ser Glu His Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly (Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile (SEQ ID NO:65) and PrPG7: Ala Val Ser Glu His Gln Leu Leu His Gly Gly Gly Gly Gly Gly Gly Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile (SEQ ID NO:66) and functional derivatives thereof.

8. (Once amended) The isolated polypeptide of claim 2 selected from the group consisting of PG5: Ala Val Ser Glu Ile Gln Leu Met His Gly Gly Gly Gly Gly Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:3), PG9: Ala Val Ser Glu Ile Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:5), PG7: Ala Val Ser Glu Ile Gln Leu Met His Gly Gly Gly Gly Gly Gly Gly Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO:6), and functional derivatives thereof.

Please substitute the following claim 11 for the pending claim 11:

11. (Once amended) The isolated polypeptide of claim 2, wherein:

- (a) S is Ser Val Ser Glu Ile Gln Leu Met His (SEQ ID NO: 44);
- (b) L is 5-10 glycine residues; and
- (c) B is Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO: 45).

Please substitute the following claim 14 for the pending claim 14:

14. (Once amended) The isolated polypeptide of claim 2, encoded by a nucleic acid sequence selected from the group consisting of: SEQ ID NO:14, SEQ ID NO:15 and SEQ ID NO:16.